

Claims

- [c1] 1. A method for directing a request involving an expected load to one server out of a plurality of servers, comprising the steps of:
- selecting a server;
 - determining whether said selected server has remaining capacity to handle said expected load; and
 - directing the request to said selected server, only if said server has remaining capacity to handle said expected load.
- [c2] 2. The method of claim 1, further comprising the step of:
- providing at least one token associated with each of the plurality of servers; and
 - wherein said step of selecting a server includes the step of selecting at least one token associated with said server.;
3. The method of claim 2, wherein a probability of selecting a token associated with said server differs from a probability of selecting a token associated with at least one other of the plurality of servers.
- [c3] 4 The method of claim 2, wherein said step of providing at least one token includes the step of;
- providing a number of tokens associated with each of the plurality of servers, wherein said number is proportional to a the load limitation of each of said plurality of servers.
- [c4] 5 The method of claim 4, further comprising the step of skewing the a probability of selection of a at least one token associated with said server, said skewed probability being disproportionate to said the number of tokens associated with said server.
- [c5] 6. The method of claim 2, wherein said step of providing at least one token includes the step of:
- providing a number of tokens associated with each of the plurality of servers, wherein said number is disproportionate to a load limitation of each of said plurality of servers and said number is at least partly based on a priority of each of the plurality of servers.

- [c6] 7. The method of claim 1, further comprising the step of:
changing said remaining capacity to reflect said expected load if said request is directed to said server.
- [c7] 8. The method of claim 1, further comprising the step of:
selecting another server if said server does not have remaining capacity to handle said expected load.
- [c8] 9. The method of claim 8, wherein said other server is part of the same set.
- [c9] 10. The method of claim 8, wherein said other server is part of a reserve set.
- [c10] 11. The method of claim 1, further comprising the step of:
resetting said remaining capacity for each time frame.
- [c11] 12. A system for allocating requests among servers, comprising:
a plurality of servers;
a first memory divided into entries, with at least one entry associated with each server and including an indication of said server;
a second memory divided into entries, with at least one entry associated with each server and including a representation of a remaining capacity of said server; and
a selector for selecting from among said entries of said first memory.
- [c12] 13. The system of claim 12, further comprising:
at least one other set of at least one server to which requests can be allocated if there is no remaining capacity in any of said plurality of servers.
- [c13] 14. A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for directing a request involving an expected load to one server out of a plurality of servers, comprising the steps of:
selecting a server;
determining whether said selected server has remaining capacity to handle said expected load; and
directing the request to said selected server, only if said server has remaining

Year	Country	Population (millions)	Urban population (millions)	Urban population (%)	Population density (per sq km)	Urban population density (per sq km)
1950	United States	150.7	70.0	46.4	26.3	100.0
1950	France	45.7	20.0	43.8	103.0	100.0
1950	Germany	68.6	30.0	43.7	166.0	100.0
1950	Italy	45.7	20.0	43.8	103.0	100.0
1950	Japan	93.0	40.0	43.0	313.0	100.0
1950	China	550.0	100.0	18.2	15.0	100.0
1950	India	361.0	50.0	13.9	170.0	100.0
1950	U.S.S.R.	164.0	50.0	30.5	8.0	100.0
1950	Canada	24.0	10.0	41.7	3.0	100.0
1950	South Africa	24.0	10.0	41.7	3.0	100.0
1950	Argentina	16.0	8.0	50.0	1.0	100.0
1950	Brazil	70.0	20.0	28.6	1.0	100.0
1950	Mexico	24.0	10.0	41.7	3.0	100.0
1950	Colombia	10.0	4.0	40.0	1.0	100.0
1950	Venezuela	10.0	4.0	40.0	1.0	100.0
1950	Peru	10.0	4.0	40.0	1.0	100.0
1950	Ecuador	4.0	1.0	25.0	1.0	100.0
1950	Guatemala	4.0	1.0	25.0	1.0	100.0
1950	Honduras	2.0	0.5	25.0	1.0	100.0
1950	El Salvador	2.0	0.5	25.0	1.0	100.0
1950	Nicaragua	2.0	0.5	25.0	1.0	100.0
1950	Panama	1.0	0.2	20.0	1.0	100.0
1950	Cuba	7.0	2.0	28.6	1.0	100.0
1950	Dominican Republic	2.0	0.5	25.0	1.0	100.0
1950	Haiti	2.0	0.5	25.0	1.0	100.0
1950	Jamaica	0.5	0.1	20.0	1.0	100.0
1950	Trinidad and Tobago	0.5	0.1	20.0	1.0	100.0
1950	Guyana	0.5	0.1	20.0	1.0	100.0
1950	Suriname	0.5	0.1	20.0	1.0	100.0
1950	French Guiana	0.5	0.1	20.0	1.0	100.0
1950	Guadeloupe	0.1	0.05	50.0	1.0	100.0
1950	Martinique	0.1	0.05	50.0	1.0	100.0
1950	Reunion	0.1	0.05	50.0	1.0	100.0
1950	French Polynesia	0.1	0.05	50.0	1.0	100.0
1950	French West Africa	0.1	0.05	50.0	1.0	100.0
1950	French North Africa	0.1	0.05	50.0	1.0	100.0
1950	French India	0.1	0.05	50.0	1.0	100.0
1950	French Madagascar	0.1	0.05	50.0	1.0	100.0
1950	French Comoros	0.1	0.05	50.0	1.0	100.0
1950	French Seychelles	0.1	0.05	50.0	1.0	100.0
1950	French Reunion	0.1	0.05	50.0	1.0	100.0
1950	French Mayotte	0.1	0.05	50.0	1.0	100.0
1950	French French Polynesia	0.1	0.05	50.0	1.0	100.0
1950	French French West Africa	0.1	0.05	50.0	1.0	100.0
1950	French French North Africa	0.1	0.05	50.0	1.0	100.0
1950	French French India	0.1	0.05	50.0	1.0	100.0
1950	French French Madagascar	0.1	0.05	50.0	1.0	100.0
1950	French French Comoros	0.1	0.05	50.0	1.0	100.0
1950	French French Seychelles	0.1	0.05	50.0	1.0	100.0
1950	French French Reunion	0.1	0.05	50.0	1.0	100.0
1950	French French Mayotte	0.1	0.05	50.0	1.0	100.0
1950	French French French Polynesia	0.1	0.05	50.0	1.0	100.0
1950	French French French West Africa	0.1	0.05	50.0	1.0	100.0
1950	French French French North Africa	0.1				

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15. A computer program product comprising a computer useable medium having computer readable program code embodied therein for directing a request involving an expected load to one server out of a plurality of servers, the computer program product comprising:

- computer readable program code for causing the computer to select a server;
- computer readable program code for causing the computer to determine whether said selected server has remaining capacity to handle said expected load; and
- computer readable program code for causing the computer to direct the request to said selected server, only if said server has remaining capacity to handle said expected load.